

PATENT
674525-2001

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicants(s) : Lamb et al.
U.S.-Serial No. : 09/310,685
Filing Date : May 4, 1999
Examiner : A. DeCloux
Art Unit : 1644
For : NOTCH

RECEIVED
AUG 22 2002
TECH CENTER 1600/2900

745 Fifth Avenue
New York, NY 10151

VIA HAND DELIVERY

DECLARATION UNDER 37 C.F.R. 1.132

Assistant Commissioner for Patents
Washington, D.C. 20231

Dear Sir:

I, Jonathan R. Lamb, declare and state that:

1. A copy of my *curriculum vitae* demonstrating my education, training and experience is appended hereto. I am a co-inventor for U.S. application Serial No. 09/310,685, and am familiar with the application and its prosecution history. Accordingly, I am considered by my peers to be an expert in the field to which the application pertains, and am otherwise qualified to speak and render expert opinions as to the present application, invention, and issues of the Office Action dated February 26, 2002. Thus, this Declaration is in response to the Office Action.

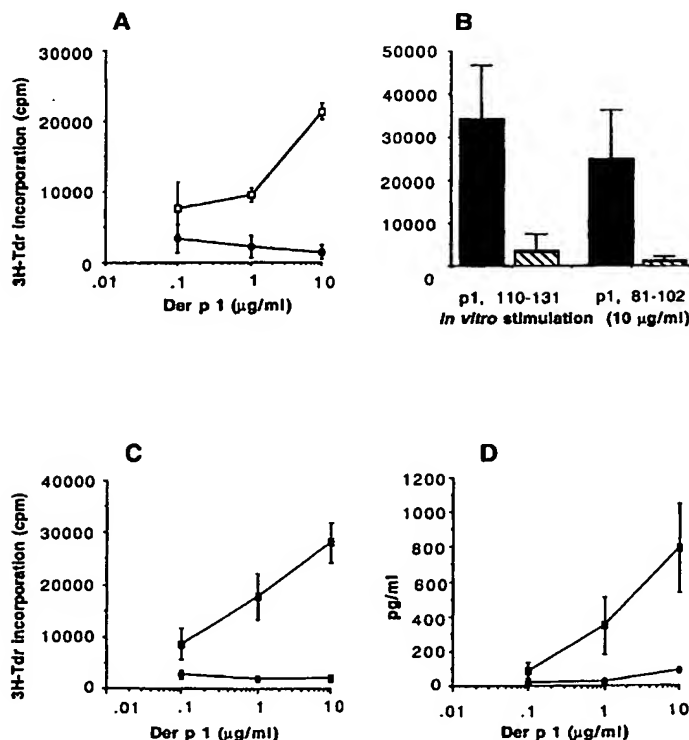
2. The following experiments were performed by me or under my direction, supervision or control, and in the ordinary course of business.

Study 1. Notch ligand expressing antigen-presenting cells inhibit T-cell immunity to the antigen presented.

(A) Mouse antigen-presenting cells (APC) were infected with Notch ligand gene *Serrate1* (●) or control (□) virus, pulsed with dust mite antigen p1, 110-131 peptide and injected into naïve C57BL/6J mice and two weeks later mice were immunized with 50 µg House Dust Mite (HDM) antigen Der p 1/Complete Freund's Adjuvant (CFA). Lymph node (LN) cells were cultured *in vitro* with Der p 1 and T-cell proliferation was measured and the results presented as mean c.p.m. \pm SD of four mice per group.

(B) LN cells from mice primed as described above [*Serrate1*⁺ APC (shaded bars) or a control APC (closed bars)] were cultured *in vitro* with the Der p1 peptides p1, 110-131 or p1, 81-102 at 10µg/ml and proliferation measured. The supernatants from these assays were collected at 24 h and assessed for IL-2 production (C), while 48 h supernatants were assessed for the presence of IFN- γ (D).

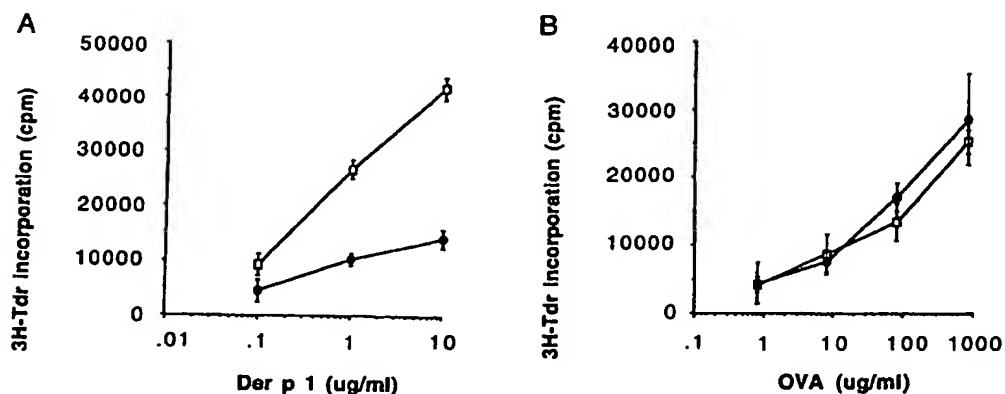
This study shows that antigen-presenting cells expressing Notch ligand are able to inhibit T-cell activity to antigen.



Study 2. Immunization with Notch ligand expressing antigen-presenting cells pulsed with specific peptide induces antigen specific but not global suppression of immunity.

(A) APC were infected with *Serrate1* (●) or control (□) virus pulsed with p1, 110-131 and 2 weeks later the mice were immunized with 50 µg Der p 1/CFA. LN cells were cultured *in vitro* with Der p 1 and proliferation was measured and the results presented as mean c.p.m. ± SD of four mice per group. (B) Mice were injected with *Serrate1*⁺ APC pulsed with p1, 110-131 as described above but then immunized with OVA/CFA. LN cells were re-stimulated with OVA *in vitro* and proliferation measured as above.

This study shows that antigen-presenting cells expressing Notch ligand in the context of one antigen are able to inhibit the immune response in relation to that specific antigen, but without global suppression of immunity (ie immune response to other antigens, such as the ovalbumin used here, is not significantly affected).

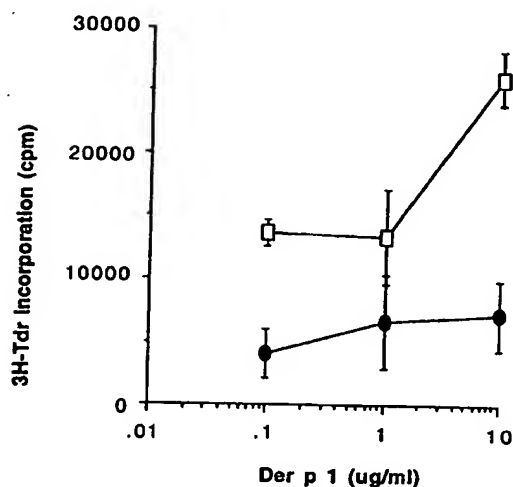


These experiments showed the ability of Notch ligand to induce tolerance in a prophylactic protocol. However, Notch ligand can also induce tolerance to an established immune response as shown in Study 3 below.

Study 3. Notch ligand expressing antigen-presenting cells inhibit established immune responses.

Naïve mice were immunized with 50 µg Der p 1/CFA and 3 weeks later they were injected with p1, 110-131-pulsed DC infected with either *Serratia* (●) or control (□) virus. Two weeks later mice were reimmunized with 50 µg Der p 1/incomplete Freund's adjuvant and the proliferative response of LN cells to re-stimulation with Der p 1 measured as described in Study 1 (A) above.

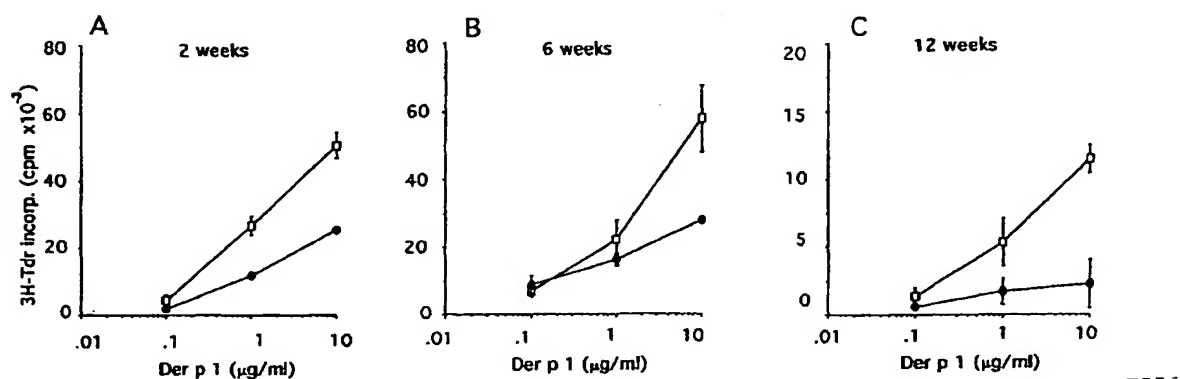
This study shows that Notch ligand can also induce tolerance to an established immune response.



Study 4. Inhibition of T-cell responses induced by Notch ligand expressing antigen-presenting cells is long lived.

p1, 110-131 peptide-pulsed APC infected with either *Serrate1*⁺ (●) or control (□) virus were injected into naïve C57BL/6J mice and (A) 2, (B) 6 or (C) 12 weeks later mice were immunized with Der p 1/CFA and proliferation determined as described in Study 1(A) above.

This study shows that Notch ligand inhibition of T-cell responses is long lived.

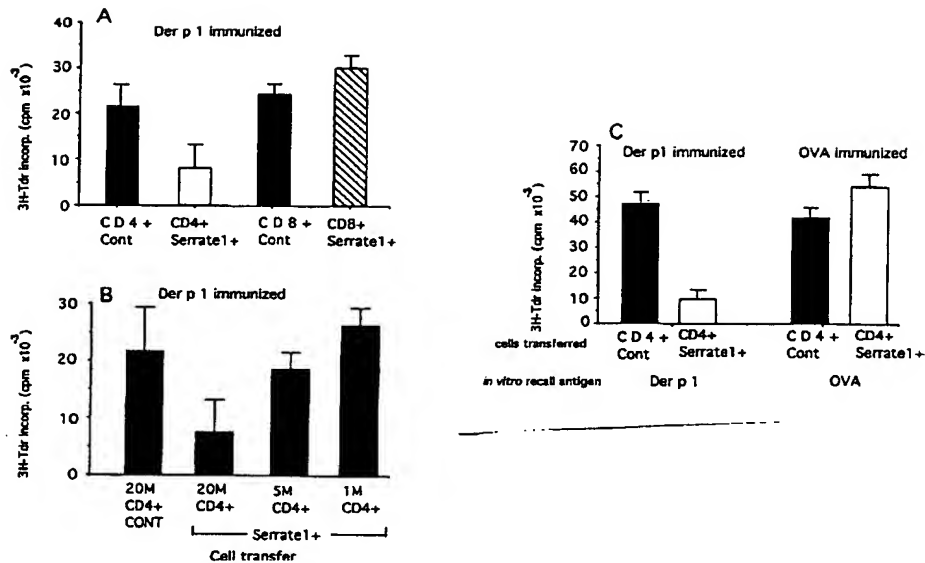


Study 5. Antigen-specific tolerance induced by Notch ligand expressing antigen-presenting cells can be transferred to naïve mice by T-cells.

(A) p1, 110-131 peptide-pulsed APC infected with either *Serrate1* or control virus were injected into naïve C57BL/6J mice and two weeks later CD4⁺ or CD8⁺ T cells were isolated from spleens and adoptively transferred to naïve mice at 2×10^7 /mouse. On the same day mice were immunized with 50 µg Der p 1/CFA and 1 week later LN cells were cultured *in vitro* with Der p 1. Results are presented for proliferation (mean c.p.m. \pm SD of four mice per group) measured at 72 h in response to re-stimulation with 10 µg/ml Der p1. Transfer of T-cells from mice injected with *Serrate 1*⁺ (open and shaded bars) or control, (solid and grey bars) DC is shown.

(B) p1, 110-131 peptide-pulsed APC infected with *Serrate1* (grey bars) or control (solid bars) virus were injected into naïve C57BL/6J mice and two weeks later CD4⁺ - T cells were isolated from spleens and transferred to naïve mice (2×10^7 control CD4⁺ T cells or 2×10^7 , 5×10^6 or 1×10^6 CD4⁺ T cells from *Serrate 1*⁺ APC injected mice) which were immunized with 50 µg Der p 1/CFA on the same day. Results are presented for proliferation of LN cells (mean c.p.m. \pm SD of four mice per group) measured at 72 h in response to re-stimulation with 10 µg/ml Der p1. (C) p1, 110-131 peptide-pulsed APC infected with *Serrate1* (open bars) or control (solid bars) virus were injected into naïve C57BL/6J mice and 2 weeks later CD4⁺ T cells were isolated from spleens and 2×10^7 cells transferred to naïve mice which were immunized with 50 µg Der p1/CFA or OVA/CFA on the same day. Results are presented for proliferation of LN cells (mean c.p.m. \pm SD of four mice per group) measured at 72 h in response to re-stimulation with 10µg/ml Der p1 or 800 µg/ml OVA.

This study shows that antigen-specific tolerance induced by Notch ligand can be transferred to naïve mice by T-cells (infectious tolerance).



3. I further declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true and further, that the statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

Date: 1/08/02

Jonathan R. Lamb
Jonathan R. Lamb

CURRICULUM VITAE

Name: Jonathan Robert Lamb

Date of birth: 13th October 1952

Nationality: British

Address: Immunobiology Group
MRC Centre for Inflammation Research
and Respiratory Medicine Unit
Edinburgh University Medical School
Teviot Place
Edinburgh EH8 9AG

Tel: 0131-651-1322
Fax: 0131-650-4384
E-mail: J.R.Lamb@ed.ac.uk

Qualifications:

1974	Bachelor of Dental Surgery BDS, Edinburgh University
1976	Bachelor of Arts BA 2nd class, Physiological Sciences (School of Natural Sciences), Oxford University
1980	Doctor of Philosophy PhD, Pathology (Immunology), Faculty of Medicine, London University
1983	Master of Arts MA, Physiological Sciences (School of Natural Sciences), Oxford University
1989	Member of Royal College of Pathologists, MRCPATH
1996	Fellow of Royal College of Pathologists, FRCPath
2000	Doctor of Science DSc, Immunology, Faculty of Medicine, Edinburgh University
2002	Fellow of the Royal Society of Edinburgh, FRSE
2002	Fellow Academy of Medical Sciences, FMedSci

University Education:

1970-74	School of Dental Surgery, Faculty of Medicine, Edinburgh University
1974-76	Brasenose College, Oxford University

1977-80 Guy's Hospital Medical and Dental Schools, London University

Honours:

1970-74 General Dental Council Scholar

1971 Distinctions in Physiology and Biochemistry, Merit in Anatomy

1973 Merits in Ethics, Economics and Jurisprudence

1974 Class medals in Forensic Odontology and Periodontology

1983 American Society for Histocompatibility and Immunogenetics Young Investigator Award

1987 Bradley Senior Scholar in Biomedicine, University of Wisconsin, Blood Center of Southeastern Wisconsin, Milwaukee, MI, USA

Appointments:

1976 Dental House Surgeon, Department of Oral Immunology and Microbiology, Guy's Hospital Medical and Dental Schools, London

1977-80 MRC Training Fellow, Department of Oral Immunology and Microbiology, Guy's Hospital Medical and Dental Schools, London

1980-82 Research Assistant Professor, Department of Paediatrics and Immunologic Oncology Division, Lombardi Cancer Research Center, Georgetown University School of Medicine, Washington DC, USA.

1982 Visiting Scientist, Depts. of Immunology & Molecular Genetics, Scripps Clinic and Research Foundation, La Jolla, CA, USA.

1982-85 Scientific Research Fellow, Imperial Cancer Research Fund, Tumour Immunology Unit, Dept. of Zoology & School of Medicine, University College London

1985-90 MRC Scientist, MRC Tuberculosis & Related Infections Unit and Department of Immunology, Royal Postgraduate Medical School, London

1988-90 Honorary Senior Lecturer, Department of Immunology, Royal Postgraduate Medical School, London

1990-97 Professor of Immunology, St. Mary's Hospital Medical School and Department of Biology, Imperial College of Science, Technology and Medicine, London

1994-97 Honorary Consultant in Clinical Immunology, St. Mary's Hospital, Praed Street, London

- 1997- Professor of Respiratory Science, MRC Centre for Inflammation Research and Respiratory Medicine Unit, Edinburgh University, Medical School, Edinburgh
- 1997- Visiting Professor, Department of Biology, Imperial College of Science, Technology and Medicine, London
- 2001- Visiting Professor, Division of Paediatric Surgery, Queen Mary Hospital, University of Hong Kong, HK

Committees and Societies:

- 1977- British Society for Immunology
- 1982-97 Antibody Club
- 1986- Editorial Board - Immunology
- 1988-92 Research Sub-committee of the Arthritis and Rheumatism Council
- 1990-95 Specialist Advisory Committee in Immunology, University of London
- 1990-95 St. Mary's Hospital Medical School, Medical Studies Committee
- 1990-95 St. Mary's Hospital Medical School, Higher Degrees Committee
- 1991-94 Chairman - Basic Science Committee British Society for Allergy and Clinical Immunology
- 1992 WHO/UNDP Programme for Vaccine Development - Committee to Define Research Priorities for Future Vaccine Adjuvants
- 1992-95 WHO Trans-disease Vaccinology Steering Committee
- 1993-95 St. Mary's Hospital Medical School, Research Sub-committee
- 1993 WHO/IUIS/IAACI Committee on Recombinant Allergens & Synthetic Epitopes
- 1993-99 Editorial Board Clinical & Experimental Allergy
- 1995-99 Editorial Board of Journal of Allergy & Clinical Immunology
- 1995-96 MRC ROPA Panel Member
- 1995-98 MRC Clinical Training & Development Panel
- 1995-2001 Executive Committee of European Science Foundation Network on HLA & Allergy

1995	ARC Committee for Clinical & Traveling Fellowships
1996-98 committee	MRC Review of Research Training and Career Development Sub-
1995-97	Convener 2nd Year Immunology Course (BSc)
1996-2001	External Examiner in Immunology (BSc Hons), Glasgow University
1997- Immunology	Editorial Board International Archives of Allergy and Clinical
1997-01	National Asthma Campaign Research Committee
1998	Cofounder of Lorantis Limited
1998-2000	Board of Directors of Lorantis Limited
1998-	Scientific Advisory Board of Lorantis Limited
1998-	Associate Editor of Thorax
1998-	MRC Advisory Board (Molecular & Cellular Medicine)
1998-	Faculty of Medicine Postgraduate Studies Committee
1998-	Animal User Committee - Edinburgh University
1999-	MRC Physiological Medicine & Infections Board
1999-	Departmental & Divisional Chairman of Health & Safety Committee - Faculty of Medicine
1999-	Management Board of the MRC Centre of Inflammation Research Edinburgh University
1998-2000	Senior Consultant to ALK Abello A/S, Horsholm, Denmark
1999-	Senior Consultant to Glaxo Smith Kline in Respiratory Medicine
1999-	Scientific Advisory Board of SR Pharma
2000-	Biological Research Resources Management Committee
2000-	Faculty of Medicine Promotions & Honorary Status Committee
2001	New Royal Infirmary Edinburgh Animal Facility Sub-committee
2001	Faculty of Medicine Research Exploitation Committee

- 2002- External Examiner MSc (Immunology) Nottingham University
- 2002- Health & Safety Advisory Committee Academic Block New Royal Infirmary Edinburgh

Publications:

1. Lamb, J. R., Kontiainen, S. & Lehner, T. (1979) The generation of specific T cell suppressor function induced by *Streptococcus mutans* in monkeys and mice. *Infect. Immun.* 26: 903-909.
2. Lamb, J. R., Kontiainen, S. & Lehner, T. (1980) A comparative study of the generation of specific T cell helper function induced by *Streptococcus mutans* in monkeys and mice. *J. Immunol.* 124: 2384-2389.
3. Zanders, E. D., Lamb, J. R., Kontiainen, S. & Lehner, T. (1980) Partial characterization of murine and monkey helper factor to a streptococcal antigen. *Immunology* 41: 587-596.
4. Lamb, J. R., Zanders, E. D., Kontiainen, S. & Lehner, T. (1980) Immunochemical properties of antigen specific monkey T cell suppressor factor induced with a *Streptococcus mutans* antigen. *Infect. Immun.* 30: 766-772.
5. Lamb, J. R., Zanders, E. D., Kontiainen, S. & Lehner, T. (1981) Regulation and specificity of the immune response to an oral *Streptococcus mutans* antigen by T cell helper and suppressor factors and B cell antibodies. *Arch. Oral Biol.* 26: 745-751.
6. Lamb, J. R., Zanders, E. D., Sanderson, A. R., Ward, P. J., Feldmann, M., Kontiainen, S., Lehner, T. & Woody, J. N. (1981) Antigen specific helper factor reacts with antibodies to human β_2 microglobulin. *J. Immunol.* 127: 231-234.
7. Lehner, T., Lamb, J. R., Welsh, K. L. & Batchelor, J. R. (1981) The association between HLA-DR antigens and high and low avidity helper cell function to a streptococcal antigen in the control of dental caries. *Nature* 292: 770-772.
8. Lehner, T., Lamb, J. R. & Kontiainen, S. (1982) Cell bound helper and suppressor factors in primate lymphocytes. *Clin. Exp. Immunol.* 47: 706-714.
9. Lamb, J. R., Eckels, D. D., Lake, P., Johnson, A. H., Hartzman, R. J. & Woody, J. N. (1982) Antigen specific human T lymphocyte clones: induction, antigen specificity and MHC restriction of influenza virus-immune clones. *J. Immunol.* 128: 233-238.

10. Lamb, J. R., Eckels, D. D., Phelan m., Lake, P. & Woody, J. N. (1982) antigen-specific human T lymphocyte clones: viral antigen specificity of influenza virus immune clones. *J. Immunol.* 128: 1428-1432.
11. Eckels, D. D., Lamb, J. R., Lake, P., Woody, J. N., Johnson, A. & Hartzman, R. J. (1982) Antigen specific human T lymphocyte clones: genetic restriction of influenza virus specific responses to HLA-D region genes. *Human Immunol.* 4: 313-324.
12. Lamb, J. R., Eckels, D. D., Ketterer, E. A., Sell, T. W. & Woody, J. N. (1982) Antigen specific human T lymphocyte clones: mechanisms of inhibition of proliferative responses by xenoantiserum to human non-polymorphic HLA-DR antigens. *J. Immunol.* 129: 1085-1090.
13. Lamb, J. R., Woody, J. N., Hartzman, R. J. & Eckels, D. D. (1982) *In vitro* influenza virus specific antibody production in man: antigen specific and HLA restricted induction of helper activity mediated by cloned human T lymphocytes. *J. Immunol.* 129: 1465-1470.
14. Lamb, J. R., Eckels, D. D., Lake, P., Woody, J. N. & Green, N. (1982) Human T cell clones recognize chemically synthesized peptides of influenza haemagglutinin. *Nature* 300: 66-69.
15. Lamb, J. R. & Feldmann, M. (1982) A human suppressor T cell clones which recognizes an autologous helper T cell clone. *Nature* 300: 456-458.
16. Eckels, D. D., Lake, P., Lamb, J. R., Johnson, A. H., Shaw, S., Woody, J. N. & Hartzman, R. J. (1983) SB-restricted presentation of influenza and herpes simplex virus antigens to human T lymphocyte clones. *Nature* 301: 716-718.
17. Lamb, J. R., Skidmore, B. J., Green, N., Chiller, J. & Feldmann, M. (1983) Induction of tolerance in influenza virus immune T lymphocyte clones with synthetic peptides of influenza haemagglutinin. *J. Exp. Med.* 157: 1434-1447.
18. Lamb, J. R., Zanders, E. D., Feldmann, M., Eckels, D. D., Woody, J. N., Lake, P. & Beverley, P. C. L. (1983) The dissociation of interleukin 2 production and antigens specific helper activity by clonal analysis. *Immunology* 50:397-405.
19. Zanders, E. D., Lamb, J. R., Feldmann, M., Green, N. & Beverley, P. C. L. (1983) Tolerance of T cell clones is associated with membrane antigen changes. *Nature* 303: 625-627.
20. Lamb, J. R. & Green, N. (1983) Analysis of the antigen specificity of influenza haemagglutinin immune human T lymphocyte clones: identification of an immunodominant region for T cells. *Immunology*, 50, 659-666.

21. Lamb, J. R. & Feldmann, M. (1984) Essential requirement for major histocompatibility complex recognition of T cell tolerance induction. *Nature* 308: 72-74.
22. Lamb, J. R., Zanders, E. D., Lake, P., Webster, R. G., Eckels, D. D., Woody, J. N., Lerner, R. A. & Feldmann, M. (1984) Inhibition of T cell proliferation by antibodies to synthetic peptides. *Eur. J. Immunol.*, 14, 153-157.
23. Moss, F. M., Acres, R. B., Souhami, R. L. & Lamb, J. R. (1984) Heterogeneity of specificity of oligoclonal human T lymphocyte lines induced with autologous pulmonary tumor. *Br. J. Cancer* 49: 659-661.
24. Eckels, D. D., Sell, T. W., Bronson, S. R., Johnson, A. H., Hartzman, R. J. & Lamb, J. R. (1984) Human helper T cell clones that recognize different influenza haemagglutinin determinants are recognized by different HLA-D region epitopes. *Immunogenetics* 19: 409-423.
25. Zanders, E. D., Feldmann, M., Green, N. & Lamb, J. R. (1984) Direct evaluation of antigen binding to human T lymphocyte clones: involvement of major histocompatibility complex products in antigen binding. *Eur. J. Immunol.* 14:1101-1105.
26. Moss, F. M., Knight, J. & Lamb, J. R. (1984) The differential effects of hydrocortisone on activation and tolerance induction in human T lymphocyte clones. *Human Immunol.* 11:, 259-270.
27. Londei, M., Lamb, J. R., Bottazzo, F. & Feldmann, M. (1984) Epithelial cells expressing aberrant class II determinants can present antigen to cloned human T cells. *Nature* 312: 639-641.
28. Acres, R. B., Lamb, J. R. & Feldmann, M. (1985) Effects of platelet derived growth factor (PDGF) and epidermal growth factor (EGF) on antigen induced proliferation of human T cell lines. *Immunology* 54: 9-16.
29. Zanders, E. D., Feldmann, M. & Lamb, J. R. (1985) Biochemical events initiated by exposure of human T lymphocyte clones to immunogenic and tolerogenic concentrations of antigen. *Eur. J. Immunol.* 15: 302-305.
30. Austin, P., Trowsdale, J., Rudd, C., Bodmer, W., Feldmann, M. & Lamb, J. R. (1985) Functional expression of HLA-DP genes transfected into mouse fibroblasts. *Nature* 313: 61-64.
31. O'Flynn, K., Zanders, E. D., Lamb, J. R., Beverley, P. C. L., Wallace, D. L., Tatham, P. E. R., Tax, W. J. M. & Linch, D. C. (1985) Investigation of early T cell activation: analysis of the effect of specific antigen, interleukin 2 and monoclonal antibodies of the intracellular free calcium concentration. *Eur. J. Immunol.* 15: 7-11.

32. Lamb, J. R., Feldmann, M., Green, N. & Lerner, R. A. (1986) Influence of antigen structure on the activation and induction of unresponsiveness in cloned human T lymphocytes. *Immunology* 57: 331-335.
33. Young, D. B., Kent, L, Rees, A. D. M., Lamb, J. R. & Ivanyi, J. (1986) Immunological activity of a 38 kilodalton protein purified from *Mycobacterium tuberculosis*. *Infect. Immun.*, 54, 177-183.
34. Young, D. B. & Lamb, J. R. (1986) T lymphocytes respond to solid-phase antigen: a novel approach to the molecular analysis of cellular immunity. *Immunology* 59: 167-171.
35. Lamb, J. R. & Young, D. B. (1987) A novel approach to the identification of T cell epitopes in *Mycobacterium tuberculosis* using human T lymphocyte clones. *Immunology* 60: 1-5.
36. Cockcroft, S., Lamb, J. R. & Zanders, E. D. (1987) Inositol lipid metabolism in human T lymphocytes activated via the T3 complex. *Immunology*, 60, 209-212.
37. Rees, A., Praputpittaya, K., Scoging, A., Dobson, N., Young, D., Ivanyi, J. & Lamb, J. R. (1987) T cell activation by anti-idiotypic antibody: evidence for the internal image. *Immunology* 60: 389-393.
38. Rees, A., Scoging, A., Dobson, N., Praputpittaya, K., Young, D., Ivanyi, J. & Lamb, J. R. (1987) T cell activation by anti-idiotypic antibody: mechanism of interaction with antigen reactive T cells. *Eur. J. Immunol.* 17: 197-201.
39. Lamb, J. R., McMichael, A. J. & Rothbard, J. B. (1987) T cell recognition of influenza viral antigens. *Human Immunol.* 19: 79-89.
40. Lamb, J. R., Ivanyi, J., Rees, A. D. M., Rothbard, J. B., Howland, K., Young, R. A. & Young, D. B. (1987) Mapping of T cell epitopes using recombinant antigens and synthetic peptides. *EMBO J.* 6: 1245-1249.
41. Sengupta, U., Sinha, S., Ramu, S., Lamb, J. R. & Ivanyi, J. (1987) Suppression of delayed hypersensitivity skin reactions to tuberculin by *M. leprae* antigens in patients with lepromatous and tuberculoid leprosy. *Clin. Exp. Immunol.* 68: 58-64.
42. Lamb, J. R., Zanders, E. D., Sewell, W., Crumpton, M. J., Feldmann, M. & Owen, M. J. (1987) Antigen specific T cell unresponsiveness in cloned helper T cells mediated via the CD2 or CD3/Ti receptor pathways. *Eur. J. Immunol.* 17: 1641-1644.
43. O'Hehir, R. E., Young, D. B., Kay, A. B. & Lamb, J. R. (1987) Cloned human T lymphocytes reactive with *Dermatophagoides farinae* (house dust mite): a comparison of T and B cell antigen recognition. *Immunology* 62:635-640.

44. Larche, M., Lamb, J. R. & Ritter, M. A. (1988) A novel T lymphocyte molecule that may function in the induction of self-tolerance and MHC restriction within the human thymic environment. *Immunology* 64: 101-105.
45. Rothbard, J. B., Lechler, R., Howland, K., Bal, V., Eckels, D., Sekaly, R., Long, E., Taylor, W. & Lamb, J. R. (1988) Structural model of HLA-DR1 restricted T cell antigen recognition. *Cell* 52: 515-523.
46. Collins, F. M., Lamb, J. R. & Young, D. B. (1988) Biological activity of protein antigens isolated from *Mycobacterium tuberculosis* culture filtrate. *Infect. Immun.*, 56, 1260-1266.
47. Essery, G., Feldmann, M. & Lamb, J. R. (1988) Interleukin-2 can prevent and reverse antigen-induced unresponsiveness in cloned T lymphocytes. *Immunology* 64: 413-417.
48. Lamb, J. R., O'Hehir, R. E. & Young, D. B. (1988) The use of nitrocellulose immunoblots for the analysis of antigen recognition by T lymphocytes. *J. Immunol. Methods* 110: 1-10.
49. Lamb, J. R., Rees, A. D. M., Bal, V., Ikeda, H., Wilkinson, D., de Vries, R. R. P. & Rothbard, J. B. (1988) Prediction and identification of an HLA-DR restricted T cell determinants in the 19kDa protein of *Mycobacterium tuberculosis*. *Eur. J. Immunol.* 18: 973-976.
50. O'Hehir, R. E., Eckels, D. D., Frew, A. J., Kay, A. B. & Lamb, J. R. (1988) MHC class II restriction specificity of cloned human T lymphocytes reactive with *Dermatophagoides farinae* (house dust mite). *Immunology* 64: 627-631.
51. Moreno, C., Mehlert, A. & Lamb, J. R. (1988) The inhibitory effects of mycobacterial lipoarabinomannan and polysaccharides upon polyclonal and monoclonal human T cell proliferation. *Clin. Exp. Immunol.* 74: 206-210.
52. Lechler, R. I., Bal, V., Rothbard, J. B., Germain, R. N., Sekaly, R., Long, E. O. & Lamb, J. R. (1988) Structural and functional studies of HLA by human helper T lymphocyte clones by using transfected murine cell lines. *J. Immunol.* 141: 3003-3009.
53. Maestrelli, P., O'Hehir, R. E., Lamb, J. R., Tsai, J-L., Cromwell, O. & Kay, A. B. (1988) Antigen induced neutrophil chemotactic factor derived from cloned human T lymphocytes. *Immunology* 65: 605-609.
54. Larche, M., Lamb, J. R., O'Hehir, R. E., Imami-Shita, N., Zanders, E. D., Quint, D. E., Moqbel, R. & Ritter, M. A. (1988) Functional evidence for a monoclonal antibody that binds to the human IL-4 receptor. *Immunology* 65: 617-622.
55. Eckels, D. D., Gorski, J., Rothbard, J. B. & Lamb, J. R. (1988) Peptide mediated modulation of T cell allorecognition. *Proc. Natl. Acad. Sci. U.S.A.* 85: 8191-8195.

56. Cox, J. H., Lamb, J. R., Bal, V., Butcher, G. W., Howard, J. C., Owen, M. J. & Ivanyi, J. (1989) The phenotypic and molecular characterization of Nb-2 lymphoma cells activated with IL-2 and human growth hormone. *Immunology* 66: 83-89.
57. Lombardi, G., Sidhu, S., Lamb, J. R., Batchelor, J. R. & Lechler, R. I. (1989) Co-recognition of endogenous antigens with HLA-DR1 by alloreactive human T cell clones. *J. Immunol.* 142: 753-759.
58. Cox, J. H., Ivanyi, J., Young, D. B., Lamb, J. R., Syred, A. D. & Francis, M. J. (1989) Orientation of epitopes influences the immunogenicity of synthetic peptides dimers. *Eur. J. Immunol.* 18: 2015-2019.
59. O'Hehir, R. E., Bal, V., Quint, D., Moqbel, R., Kay, A. B., Zanders, E. D. & Lamb, J. R. (1989) An *in vitro* model of allergen dependent IgE synthesis by human B cells: comparison of the response of an atopic and non-atopic individual to *Dermatophagoides* spp. *Immunology* 66: 499-504.
60. Mendez-Samperio, P., Lamb, J. R., Bothamley, G., Stanley, P., Ellis, C. & Ivanyi, J. (1989) Molecular analysis of the T cell repertoire in family contacts and patients with leprosy. *J. Immunol.* 142: 3599-3604.
61. Lamb, J. R., Kay, A. B. & O'Hehir, R. E. (1989) HLA class II restriction specificity of *Dermatophagoides* reactive T cell clones that support IgE synthesis. *Clin. Exp. Allergy.* 19, 389-393.
62. Lamb, J. R., Bal, V., Mendez-Samperio, P., Mehlert, A., So, A., Rothbard, J. B., Jindal, S., Young, R. A. & Young, D. B. (1989) Stress proteins may provide a link between the immune response to infection and immunity. *Int. Immunol.* 1: 191-197.
63. Brett, S. J., Lamb, J. R., Cox, J. H., Rothbard, J. B., Mehlert, A., van Embden, J. & Ivanyi, J. (1989) Differential pattern of T cell recognition of the 65kDa mycobacterial antigen following immunization with the whole protein or peptides. *Eur. J. Immunol.* 19: 1303-1310.
64. Rothbard, J. B., Busch, R., Howland, K., Bal, V., Fenton, C., Taylor, W. & Lamb, J. R. (1989) Structural analysis of a peptide-HLA class II complex: identification of critical interactions for its formation and recognition by T cell receptor. *Int. Immunol.* 1: 479-486.
65. Rothbard, J. B., Busch, R., Bal, V., Trowsdale, J., Lechler, R. I. & Lamb, J. R. (1989) Reversal of HLA restriction by a point mutation in an antigenic peptide. *Int. Immunol.* 1: 487-495.
66. Rees, A. D. M., Lombardi, G., Scoging, A., Barber, L., Mitchell, D., Lamb, J. R. & Lechler, R. (1989) Functional evidence for the recognition of endogenous peptides by autoreactive T cell clones. *Int. Immunol.* 1: 624-630.

67. O'Hehir, R. E., Mach, B., Berte, C., Tiercy, J-M., Bal, V., Greenlaw, R., Trowsdale, J., Lechler, R. & Lamb, J. R. (1990) Direct evidence for a functional role of HLA-DRB3 gene products in the recognition of *Dermatophagoides* spp. by helper T cell clones. *Int. Immunol.* 2: 885-892.
68. Bal, A., McIndoe, A., Denton, G., Hudson, D., Lombardi, G., Lamb, J. & Lechler, R. (1990) Antigen presentation by keratinocytes induces tolerance in human T cells. *Eur. J. Immunol.* 20: 1893-1899.
69. O'Hehir, R.E. & Lamb, J.R. (1990) Induction of specific clonal anergy in human T lymphocytes by *Staphylococcus aureus* enterotoxins. *Proc. Natl. Acad. Sci. U.S.A.* 87: 8884-8888.
70. O'Hehir, R. E. & Lamb, J. R. (1991) Cellular and molecular basis of T cell recognition of the human T cell response to *Dermatophagoides* spp. (house dust mite). *Parasite Immunol.* 13, 209-215.
71. O'Hehir, R. E., Aguilar, B. A., Schmidt, T. J., Gollnick, S. O. & Lamb, J. R. (1991) Functional inactivation of *Dermatophagoides* spp. (house dust mite) reactive T cell clones. *Clin. Exp. Allergy* 21: 209-215.
72. O'Hehir, R. E., Busch, R., Rothbard, J. B. & Lamb, J. R. (1991) An *in vitro* model of peptide-mediated immunomodulation of the human T cell response to *Dermatophagoides* spp. (house dust mite). *J. Allerg. Clin. Immunol.* 87: 1120-1127.
73. Devereux, D., O'Hehir, R. E., McGuire, J., van Schooten, W. C. A. & Lamb, J. R. (1991) HLA-DR4Dw4-restricted T cell recognition of self antigen(s) in the rheumatoid synovial compartment. *Int. Immunol.* 3: 635-640.
74. Busch, R., Hill, C. M., Hayball, J., Lamb, J. R. & Rothbard, J. B. (1991) Effect of natural polymorphisms at position 86 of DR β 1 chain on peptide binding. *J. Immunol.* 147: 1292-1298.
75. O'Hehir, R. E., Yssel, H., Verma, S., de Vries, J. E., Spits, H. & Lamb, J. R. (1991) Clonal analysis of differential lymphokine production in peptide and superantigen induced T cell anergy. *Int. Immunol.* 3: 819-826.
76. Rees, A. D. M., Donati, Y., Lombardi, G., Lamb, J. R., Polla, B. & Lechler, R. I. (1991) Stress induced modulation of antigen presenting cells. *Immunology* 74: 386-392.
77. Barber, L. D., Bal, V., Lamb, J. R., O'Hehir, R. E., Yendle, J., Hancock, R. J. T. & Lechler, R. I. (1991) The contribution of T cell receptor-contacting and peptide-binding residues of the class II molecule HLA-DR4 Dw10 to serological and antigen specific T cell recognition. *Human Immunol.* 32: 110-118.
78. O'Hehir, R.E. & Lamb, J.R. (1992) Strategies for modulating immunoglobulin E synthesis. *Clin. Exp. Allergy* 22: 7-10.

79. Buelow, R., O'Hehir, R. E., Schreifels, R., Kummerehl, T. J., Riley, G. & Lamb, J. R. (1992) Localisation of the immunological activity in the superantigen staphylococcal enterotoxin B using truncated recombinant fusion proteins. *J. Immunol.* 148: 1-6.
80. Schall, T. J., O'Hehir, R. E., Goeddel, D. V. & Lamb, J.R. (1992) Uncoupling of cytokine mRNA expression and protein secretion during the induction phase of T cell anergy. *J. Immunol.* 148: 381-387.
81. Faith, A., O'Hehir, R. E., Malkovsky, M. & Lamb, J. R. (1992) Analysis of the basis of resistance and susceptibility of CD4+ T cells to HIV-gp120 induced anergy. *Immunology* 76, 1-8.
82. Zheng, R. Q. H., Chu, C. Q., Abney, E. R., Field, M., Maini, R. N., Lamb, J. R. & Feldmann, M. (1992) Detection of *in vivo* production of tumour necrosis factor – α by human thyroid epithelial cells. *Immunology* 75: 456-462.
83. Hewitt, C. R. A., Lamb, J. R., Hayball, J., Hill, M., Owen, M. J. & O'Hehir, R. E. (1992) MHC independent clonal T cell anergy by direct interaction of *Staphylococcus aureus* enterotoxin B with the T cell antigen receptor. *J. Exp. Med.* 175: 1493-1501.
84. Higgins, J. A., Lamb, J. R., Hayball, J. D., Marsh, S., Tonks, S., Rosen-Bronson, S., Bodmer, J. A. & O'Hehir, R. E. (1992) Peptide-induced non-responsiveness of HLA-DP restricted human T cells with *Dermatophagoides* spp. (house dust mite). *J. Aller. Clin. Immunol.* 90: 749-756.
85. Colaco, C. A. L. S. & Lamb, J. R. (1992) The requirements for activation of an antigen specific T cell clone via the CD3 complex. *Cell Mol. Biol.* 38: 861-866.
86. Viney, J., Prosser, H., Hewitt, C. R. A., Lamb, J. R. & Owen, M. J. (1992) Generation of monoclonal antibodies against a human T cell receptor β chain expressed in transgenic mice. *Hybridoma* 11: 701-713.
87. Lake, R. A., O'Hehir, R. E., Verhoef, A. & Lamb, J. R. (1993) CD28 mRNA rapidly decays when activated T cells are functionally anergised with specific peptide. *Int. Immunol.* 5: 461-466.
88. O'Hehir, R. E., Verhoef, A., Panagiotopoulou, E., Keswani, S., Thomas, W. R. & Lamb, J. R. (1993) Analysis of human T cell responses to the group II allergen of *Dermatophagoides* spp. (house dust mite): localisation of major antigenic sites. *J. Aller. Clin. Immunol.* 92: 105-113.
89. Hoyne, G., O'Hehir, R. E., Wraith, D. G., Thomas, W. R. & Lamb, J. R. (1993) Inhibition of T cell and antibody responses to house dust mite allergen by inhalation of the dominant T cell epitope in naive and sensitised mice. *J. Exp. Med.* 178: 1783-1788.

90. Wedderburn, L. R., O'Hehir, R. E., Hewitt, C. R. A., Lamb, J. R. & Owen, M. J. (1993) *In vivo* clonal dominance and limited T cell receptor usage in human CD4⁺ T cell recognition of house dust mite allergens. *Proc. Natl. Acad. Sci. USA* 90: 8214-8218.
91. Bal, V., Lamb, J. R. & Lechler, R. I. (1993) Analysis of accessory signalling in human T cell clones. *Human Immunol.* 37: 101-107.
92. Verhoef, A., Higgins, J. A., Thorpe, C., Marsh, S. G. E., Hayball, J. D., Lamb, J. R. & O'Hehir, R. E. (1993) Clonal analysis of the atopic immune response to the group 2 allergen of *Dermatophagoides* spp: identification of HLA-DR and -DQ restricted T cell epitopes. *Int. Immunol.* 5: 1589-1599.
93. Viney, J. L., Prosser, H., Palmer, D. B., Lipoldova, M., Lamb, J. R. & Owen, M. J. (1993) Analysis of T cell repertoire and function in mice transgenic for the human V β 3 T cell receptor. *Int. Immunol.* 5: 1541-1551.
94. Hayball, J. D., Robinson, J. H., O'Hehir, R. E., Verhoef, A., Lamb, J. R. & Lake, R. A. (1994) Identification of two binding sites in staphylococcal enterotoxin B that confer specificity for T cell receptor V β 3 gene products. *Int. Immunol.* 6: 199-215.
95. Higgins, J. A., Hayball, J. D., Thorpe, C., O'Hehir, R. E. & Lamb, J. R. (1994) Overlapping T cell epitopes in the group I allergen of *Dermatophagoides* speciesrestricted by HLA-DP and -DR class II molecules. *J. Aller. Clin. Immunol.*, 93, 891-899.
96. Jones, C., Lake R. A., Lamb, J. R. & Faith, A. (1994) Degeneracy of TCR recognition of an influenza virus haemagglutinin epitope restricted by HLA-DQ and -DR class II molecules. *Eur. J. Immunol.* 24: 1137-1142.
97. Seth, A. H., Stern, L. J., Ottenhof, T. H. M., Engel, I., Owen, M. J., Lamb, J. R., Klausner, R. D. & Wiley, D. C. (1994) Binary and tertiary complexes among soluble T-cell receptor, soluble class II MHC and superantigen molecules. *Nature* 369: 324-327.
98. Jarman, E. R., Hawrylowicz, C. M., Panagiotopolou, E., O'Hehir, E. R. & Lamb, J. R. (1994) Inhibition of human T cell responses to house dust mite allergens by a T cell receptor peptide. *J. Allergy Clin. Immunol.* 94: 844-852.
99. Hoeger, P. H., Tepper, M. A., Faith, A., Higgins, J. A., Lamb, J. R. & Geha, R. S. (1994) Immunosuppressant deoxyspergualin (DSG) inhibits antigen processing in monocytes. *J. Immunol.* 153: 3908-3916.
100. Higgins, J. A., Lamb, J. R., Lake, R.A. & O'Hehir, R. E. (1994) Polyclonal and clonal analysis of human CD4⁺ T lymphocyte responses to nut extracts. *Immunology* 84: 91-97.

101. Wotton, D., Higgins, J. A., O'Hehir, R. E., Lamb, J. R. & Lake, R. A. (1995) Differential induction of NF-AT complex during restimulation and induction of T cell anergy. *Human Immunol.* 42: 95-102.
102. Faith, A., Higgins, J. A., O'Hehir, R. E. & Lamb, J. R. (1995) The LFA-1/I-CAM-1 complex regulates the T cell receptor mediated response of cloned house dust mite specific human CD4+ T cells. *Clin. Exp. Allergy* 25: 1163-1171.
103. Lamb, J. R., Higgins, J. A., Hetzel, C., Hayball, J. D., Lake, R. A. & O'Hehir, R. E. (1995) The effects of changes at peptide residues contacting MHC class II or TcR on antigen recognition and human TH0 cell effector function. *Immunology* 85: 447-455.
104. Levin, M., Curtis, N., Lamb, J. R. & Zheng, R. (1995) Selective T cell V β receptor usage in Kawasaki disease: evidence for a superantigen mediated process. *Arch. Dis. Child.* 72: 308-311.
105. Lamb, J. R., Faith, A., Higgins, J. A., Verhoef, A., Schneider, P., Yssel, H. & O'Hehir, R. E. (1995) Clonal analysis of CD4 mediated accessory function on the effector activity of human CD4+ T cell subsets. *Clin. Exp. Allergy* 25: 839-847.
106. Hayball, J. D., O'Hehir, R. E., Lamb, J. R. & Lake, R. A. (1995) Domain structure and functional relationship in the bacterial superantigen staphylococcal enterotoxin B. *Biol. Chem.* 376: 303-309.
107. Wedderburn, L. R., Searle, S. J. M., Rees, A. R., Lamb, J. R. & Owen, M. J. (1995) Mapping T cell recognition: the identification of a T cell receptor residue critical to the specific interaction with an influenza haemagglutinin peptide. *Eur. J. Immunol.* 25: 1654-1662.
108. O'Brien, R. M., Thomas, W. R., Nicholson, I., Lamb, J. R. & Tait, B. D. (1995) An immunogenetic analysis of the T cell recognition of the major house dust mite allergen Der p 2: identification of high and low responder HLA-DQ alleles and localisation of T cell epitopes. *Immunology* 86: 176-182.
109. Gelder, C. M., Welsh, K., Faith, A., Lamb, J. R. & Askonas, B. A. (1995) Immunogenetics of human CD4+ T cell responses to influenza A haemagglutinin following natural infection. *J. Virol.* 69:7497-7506.
110. O'Hehir, R. E., Lake, R. A., Schall, T. J., Yssel, H. Panagiotopolou, E. & Lamb, J. R. (1996) Regulation of cytokine and chemokine transcription in human Th2 cells during the induction phase of anergy. *Clin. Exp. Allergy* 26: 20-28.
111. D'Souza, S., Levin, M., Faith, A., Yssel, H., Bennett, B., Lake, R. A., Brown, I. N. & Lamb, J. R. (1996) Diminished interferon-gamma production in disseminated *Mycobacterium avium* complex infections. *Clin. Exp. Immunol.* 103: 35-39.

112. Faith, A., O'Hehir, R. E., Yssel, H. & Lamb, J. R. (1996) Reversal of the inhibitory effects of HIV-gp120 on CD4+ T cells by stimulation through the CD28 pathway. *Clin. Exp. Immunol.* 105: 225-230.
113. Hoyne, G. F., Askonas, B. A., Hetzel, C., Thomas, W. R. & Lamb, J. R. (1996) Regulation of house dust mite responses by inhaled peptide: transient activation of CD4+ T cells precedes the development of tolerance *in vivo*. *Int. Immunol.* 8: 335-342.
114. Hawrylowicz, C. M., Jarman, E. R., Guida, L., O'Hehir, R. E. & Lamb, J. R. (1996) T cell receptor peptides that inhibit the T cell response to allergen induce transforming growth factor β 1 production. *J. Allergy Clin. Immunol.* 97: 707-709.
115. Tsitoura, D. C., Holter, W., Cerwenka, A., Gelder, C. M. & Lamb, J. R. (1996) The induction of anergy in human Th0 cells by stimulation with altered T cell antigen receptor ligands. *J. Immunol.* 156: 2801-2808.
116. Kristensen, N., Hoyne, G. F., Hayball, J. D., Hetzel, C., Bourne, T. & Lamb, J. R. (1996) Induction of T cell responses to the invariant chain derived CLIP peptide in mice immunised with the group 1 allergen of house dust mite. *Int. Immunol.* 8:1091-1098.
117. Gelder, C. M., Lamb, J. R. & Askonas, B. A. (1996) Human CD4+ T cell recognition of influenza virus A haemagglutinin after subunit vaccination. *J. Virol.* 70: 4787-4790.
118. Tsitoura, D. C., Verhoef, A., Gelder, C. M., O'Hehir, R. E. & Lamb, J. R. (1996) Altered T cell ligands derived from a major house dust mite allergen enhance IFN- γ but not IL-4 production by human CD4+ T cells. *J. Immunol.* 157: 2160-2165.
119. Hayball, J.D., Jones, C.M., Lamb, J. R. & Lake, R. A. (1996) A T cell clone with three potential TCR $\alpha\beta$ chain rearrangements expresses only one receptor combination at the cell surface. *Mol. Immunol.* 33: 1177-1181.
120. Harris, S. J., Roth, J-F, Savage, N., Woodrow, S. A., Hoyne, G. F., Lamb, J. R. & Layton, G. T. (1997) Prediction of murine MHC class I epitopes in a major house dust mite allergen and induction of T1-type CD8+ T cell responses *Int. Immunol.* 9: 273-280.
121. Hayball, J.D., Fidler, S.J., Palliser, D., Rees, A.D.M., Lamb, J. R. & Lake, R. A. (1997) Tandem peptide epitopes facilitate CD4 dependent activation of T cell clones. *Immunol. Cell Biol.* 75: 148-153.
122. Hoyne, G. F., Jarnicki, A. G. Thomas, W. R. & Lamb, J. R. (1997) Characterisation of the specificity and duration of T cell tolerance to intranasally administered peptides in mice: a role for intramolecular epitope suppression. *Int. Immunol.* 9: 1165-1173.

123. Tsitoura, D. C., Gelder C. M., Kemeny, D. M. & Lamb, J. R. (1997) Regulation of cytokine production by human Th0 cells following stimulation with peptide analogues: differential expression of TGF- β in activation and anergy. *Immunology* 92: 10-19.
124. Till, S., Walker, S., Dickinson, R., Huston, D., O' Brien F., Lamb, J., Kay A. B., Corrigan C. & Durham, S. (1997) Interleukin-5 production by allergen-stimulated T cells following grass pollen immunotherapy for seasonal rhinitis. *Clin. Exp. Immunol.* 110: 114-121.
125. Abou-Zeid, C., Gares, M-P., Inwald J., Janssen, R., Zhang, Y., Young, D. B., Hetzel, C., Lamb, J. R., Baldwin, S. L., Orme, I. M., Yeremeev, V., Nikonenko, B. V., & Apt, A. S. (1997) Induction of a type 1 immune response to a recombinant antigen from *Mycobacterium tuberculosis* expressed in *Mycobacterium vaccae*. *Infect. Immun.* 65: 1856-1862.
126. Gelder, C., Davenport, M., Barnardo, M., Lamb, J., Askonas, B., Hill, A., & Welsh, K. (1998) Six unrelated HLA-DR matched adults recognise identical CD4+ T cell epitopes from influenza a haemagglutinin that are not simply peptides with high HLA-DR binding affinities. *Int. Immunol.* 10: 211-222.
127. Hetzel, C., Janssen, R., Ely, S. J., Kristensen, N. M., Bunting K, Cooper, J. B., Lamb, J. R., Young, D. B. & Thole, J. (1998). An epitope delivery system using recombinant mycobacteria. *Infect. Immun.* 66: 3643-3648.
128. Lowrey, J.L., Savage, N.D., Palliser, D., Corsin-Jimenez, M., Forsyth, L.M., Hall, G., Lindey, S., Stewart, G.A., Tan, K.A., Hoyne, G.F., & Lamb, J.R. (1998). Induction of tolerance via the respiratory mucosal. *Int. Arch. Allergy Immunol*, 116:93-102.
129. Palliser, D., Lowrey, J.A., Lamb, J.R., & Hoyne, G.F. (1998). T cell response to inhaled antigen. *Clin. Immunol.* 71:161-177.
130. Tsitoura D.C., DeKruyff, R., Lamb, J. R., & Umetsu D. T. (1999). Intranasal exposure to protein antigen induces immunological tolerance by functionally disabling CD4+ T cells. *J. Immunol*, 163: 2592-2600.
131. Hirschberg, S., Layton, G. T., Harris, S. J., Savage, N., Dallman, M. J., & Lamb, J. R. (1999). CD4+ T cells induced by virus-like particles expressing a major T cell epitope downregulate IL-5 production in an ongoing immune response to Der p 1 independently of IFN- γ production. *Int. Immunol.* 11: 1927-1933.
132. Hoyne, G. F., LeRoux, I., Corsin-Jimenez, M., Tan, K., Dunn, J., Forsyth, L., Dallman M. J., Owen, M. J., Ish-Horowicz, D. & Lamb, J. R. (2000). *Serratel* induced *Notch* signalling regulates the decision between immunity and tolerance made by peripheral CD4+ T cells. *Int. Immunol*, 12: 177-185.

133. Verhoef, A & Lamb, J. R. (2000). Threshold signalling of human Th0 cells in activation and anergy: modulation of effector function by altered TCR ligands. *J. Immunol.* 164: 6034-6040.
134. Pala, P., Verhoef, A., Lamb, J. R. & Openshaw, P. J. M. (2000) Single cell analysis of cytokine kinetics by human CD4+ T cell clones during activation or tolerance induction. *Immunology* 100: 209-216.
135. Hoyne, G. F., Tan, K., Corsin-Jimenez, M., Wahl, K., Stewart, M., Howie, S. E. M. & Lamb, J. R. (2000). Immunological tolerance to inhaled antigen. *Am. J. Resp. Crit. Care Med.* 162: 169-174.
136. Pasare, C., Bansal, P., Mendiratta, S. K., George, A., Lamb, J. R., Rath, S. & Bal, V. (2001) T cells in mice expressing a transgenic human TCR- β chain get positively selected but cannot be activated in the periphery by signaling through TCR. *Int. Immunol.* 13: 53-62.
137. Janssen, R., Kruisselbrink, A., Hoogteijling, L., Lamb, J. R., Thole, J. E. R. & Young, D. B. (2001) Comparative analysis of recombinant mycobacteria as Th1 vaccines in an allergy challenge model. *Immunology* 102:441-449.
138. Ali, M., Ponchel, F., Francis, M. J. D., Lancaster, F. C., Wu, X., Verhoef, A., Boylston, A. W., Veale, D. J., Emery, P., Markham, A. F., Lamb, J. R. & Isaacs, J. D. (2001) Rheumatoid arthritis synovial T cells regulate expression of several genes associated with antigen-induced anergy. *J. Clin. Invest.* 107: 519-528.
139. Nuttall, T. J., Lamb, J. R. & Hill, P. B. (2001) Characterisation of major and minor *Dermatophagoides* allergens in canine dermatitis. *Res. Vet. Sci.* 71: 51-57.
140. Nuttall, T. J., Lamb, J. R. & Hill, P. B. (2001) Peripheral blood mononuclear cell responses to *Dermatophagoides farinae* in canine atopic dermatitis. *Vet. Immunol. Immunopathol.* 82: 273-280.
141. Nuttall, T. J., Pemberton, A. D., Lamb, J. R. & Hill, P. B. (2002) Peripheral blood mononuclear cell responses to major and minor *Dermatophagoides* allergens in canine atopic dermatitis. *Vet. Immunol. Immunopathol.* 84: 143-150.
142. Bhatia, S., Mukhopadhyay, S., Jarman, E., Hall, G., George, A., Basu, S.K., Rath, S., Lamb, J.R. & Bal, V. (2002) Scavenger receptor-specific allergen delivery elicits IFN- γ -dominated immunity and directs established Th2-dominated responses to a non-allergic phenotype. *J. Allergy Clin. Immunol.* 109: 321-328.
143. Kircher, M. F., Häusler T., Nickel, R., Lamb, J. R., Renz, H., & Beyer, K (2002) V β 18.1⁺ and V α 2.3⁺ T-cell subsets are associated with house dust mite allergy in humans. *J. Allergy Clin. Immunol.* 109: 517-523.

144. Stuart, L. M., Lucas, M., Simpson, C., Lamb, J., Savill, J. & Lacy-Hulbert, A. (2002) Inhibitory effects of apoptotic cell ingestion upon endotoxin driven myeloid dendritic cell maturation. *J. Immunol.* 168: 1627-1635.
145. Nuttall, T. J., Knight, P. A., McAleese, S. M., Lamb, J. R. & Hill, P. B. (2002) Expression of T-helper 1, T-helper 2 and immunosuppressive cytokines in canine atopic dermatitis. *Clin. Exp Allergy* 32: 789-795.
146. Nuttall, T. J., Knight, P. A., McAleese, S. M., Lamb, J. R. & Hill, P. B. (2002) T-helper 1, T-helper 2 and immunosuppressive cytokines in canine atopic dermatitis. *Vet. Immunol. Immunopathol.* 87: 379-384.
147. Lowrey, J. A., Stewart, G. A., Lindey, S., Hoyne, G. F., Dallman, M. J., Howie, S. E. M. & Lamb, J. R. (2002) Sonic hedgehog promotes cell cycle progression in activated peripheral CD4+ T lymphocytes. *J. Immunol.*, in press.
148. Hall, G., Houghton, C. G., Rahbek, J. U., Lamb, J. R. & Jarman, E. R. (2002) Suppression of allergen reactive Th2 responses and pulmonary eosinophilia by intranasal administration of an immunodominant peptide is linked to IL-10 production. *Vaccine*, in press.
149. Stewart, G. A., Hoyne, G. F., Ahmad, S. A., Jarman, E. M., Harrison, D. J., Haslett, C., Lamb, J. R. & Howie, S. E. M. (2002) Sonic hedgehog and TGF- β are upregulated in chronic lung fibrosis and inflammation. *J. Pathol.*, in press.
150. Faith, A., Richards, D. F., Verhoef, A., Lamb, J. R., Lee, T. K. & Hawrylowicz, C. M. (2002) Impaired secretion of IL-13 by allergen specific T cells correlates with defective nuclear expression of NF-AT2 and jun B: relevance to immunotherapy. *Eur. J. Immunol.*, under revision.
151. Hall, G., Lund, L., Lamb, J. R. & Jarman, E. R. (2002) Kinetics and mode of peptide delivery via the respiratory mucosa determine the outcome of activation versus Th2 immunity in allergic inflammation of the airways. *J. Allergy Clin. Immunol.*, under revision.
152. Draghi, M., Jarman, E., Grifantini, R., Galli-Stampino, L., Lamb, J. R., Valiante, N. M. & Grandi, G. (2002) DNA vaccination in Der p 1-allergic mice induces a new subset of allergen-specific, non-cytotoxic IFN- γ producing CD8+ T cells. *Eur. J. Immunol.*, under revision.
153. Savage N. D. L., Harris, S. H., Rossi, A. G., De Silva, B., Howie, S. E. M., Layton, G. T. & Lamb, J. R. (2002) Inhibition of TCR mediated shedding of L-selectin (CD62L) on CD4+ T cells by metalloproteinase inhibition: implications for the regulating the balance of Th1/Th2 function in allergic disease. *Eur. J. Immunol.*, under revision.
154. Wahl, K., Wong, K., Carpenter, M., Hoyne G., Dallman, M., Howie, S. & Lamb, J. (2002) differential effects of Notch ligands Jagged1 and Delta1 on

- primary CD4+ and CD8+ T cell responses to transplantation antigens. *Eur. J. Immunol.*, submitted.
155. Stewart, G. A., Lowrey, J. A., Wakelin, S. Lindey, S., Dallman, M. J., Lamb, J. R. & Howie, S. E. M. (2002) Sonic hedgehog signalling modulates activation and cytokine production by human peripheral CD4+ T cells. *J. Immunol.*, submitted.
 156. Adamson, K. A., Forsyth, L., Howie, S. E. M., Seckl, J. R., Pearce, S. H. S. & Lamb, J. R. (2002) Expression of the autoimmune regulator gene (Aire) at the RNA and protein level is not limited to tissues of the immune system, in preparation.
 157. Wong, K. K., Carpenter, M. J. Hoyne, G. F., Lamb, J. R., Gibbs, P. & Dallman, M. J. (2002) The Notch receptor: a novel target in the pursuit of transplantation tolerance, in preparation.
 158. Jarman, E. R., Draghi, M., Grandi, G. & Lamb, J. R. (2002) DNA vaccination reverses established pulmonary Th2 immunity and prevents progression to remodelling in an experimental model of allergen induced airway inflammation, in preparation.

Invited Chapters and Reviews:

1. Eckels, D. D., Lamb, J. R., Lake, P., Hartzman, R. J., Johnson, A. H. & Woody, J. N. (1983) Multiple gene control human immune responses. In: *Ir Genes, Past, Present, and Future* (Eds. Pierce, C. W., Cullen, S. E., Kapp, J. A., Schwartz, B. D. & Schreffler, D. C. Humana Press, New York, pp.535-541.
2. Woody, J. N., Lamb, J. R., Fischer, A., Zanders, E. D., Eckels, D. D., Lake, P., Hartzman, R. J., Johnson, A. H., Beverley, P. C. L. & Feldmann, M. (1983) Generation of monoclonal human antigen specific T cell helper factors. *Adv. Immunopharm.* 2, 315-319.
3. Feldmann, M., Zanders, E. D., Culbert, E. J. & Lamb, J. R. (1984) Antigen specific molecules from T cells: the relationship of T cell factors and receptors. In: *Regulation of the Immune System* (Eds. Cantor, H., Chess, L. & Sercarz, E. E.) Alan Liss Inc: pp. 415-428.
4. Lamb, J. R. & Zanders, E. D. (1984) Immunological tolerance *in vitro* a review. *J. Royal Soc. Med.* 77, 135-136.
5. Feldmann, M. & Lamb, J. R. (1984) Clonal approaches to immune regulation by lymphocytes. *Behring Inst. Mitt.* 74, 149-156.
6. Lamb, J. R., Moss, F. M. & Eckels, D. D. (1985) Cellular immunity to viruses. In: *Immunochemistry of Viruses - the basis for serodiagnosis and vaccines* (Eds. Van Regenmortel, M. H. V. & Neurath, A. R.). Elsevier Press: pp. 39-53.
7. Eckels, D. D. & Lamb, J. R. (1985) Human T lymphocyte clones: genetic control specificity and function. In: *T cell clones* (eds. von Boehmer, H. & Haas, W.) Elsevier Biomedical Press: pp. 323-332.
8. Lamb, J. R. & Zanders, E. D. (1985) The induction of antigen specific unresponsiveness in cloned T lymphocytes. In: *Immune Regulation* (Eds. Mitchison, N. A. & Feldmann, M.). Humana Press, New York: pp. 51-59.
9. Lamb, J. R., Feldmann, M. & Zanders, E. D. (1985) Human T cell recognition of influenza haemagglutinin. In: *Immune Recognition of Protein Antigens* (Eds. Laver, G. and Air, G.). Current Communications in Molecular Biology. Cold Spring Harbor: pp. 56-60.
10. Lamb, J. R., Zanders, E. D., Fischer, A., Smith, S., Golay, J., Green, N., Beverley, P. C. L. & Feldmann, M. (1985) Regulation of B cell function by human T lymphocyte clones. *Lymphokines* 10: 57-87.
11. Feldmann, M., Zanders, E. D. & Lamb, J. R. (1985) Tolerance in T cell clones. *Immunol. Today* 6: 58-62.

12. Rees, A. D. M., Knott, G. & Lamb, J. R. (1985) Antigen specific human T cell clones: heterogeneity of specificity and function. *Behring Inst. Mitt.* 77: 75-81.
13. Feldmann, M., Essery, G. Londei, M., Austin, P., Trowsdale, J., Bodmer, W. & Lamb, J. R. (1985) Role of IL-1 in the activation and inactivation of human T cell clones: relevance to rheumatological disease. *Brit. J. Rheum.* 24 (Suppl 1): 102-104.
14. Mitchell, D. M., McMichael, A. J. & Lamb, J. R. (1985) The immunology of influenza. *Brit. Med. Bull.* 41: 80-85.
15. Beverley, P. C. L., O'Flynn, K., Wallace, D. L., Lamb, J. R., Boylston, A. W. & Linch, D. C. (1986). Regulation of activation and proliferation in T cells. In: *Leukocyte Typing* (Eds. Haynes, B. F., Nadler, L. M. & Bernstein, I. D.) Springer-Verlag, New York 1: 427-439.
16. Lamb, J. R. & Eckels, D. D. (1986) Human T cell recognition of influenza viral antigens and class II MHC gene products. In: *Options for the Control of Influenza* (Eds. Kendal, A. P. & Patriarca, P. A.) Alan Liss Inc: pp. 423-434.
17. Cox, J. H. & Lamb, J. R. (1986) Cellular immunity to viruses: antigen recognition and effector function. *Rivista di Immunologia ed Immunofarmacologia.* 6: 197-201.
18. Lamb, J. R., Ivanyi, J., Rees, A., Young, R. A. & Young, D. B. (1986) The identification of T cell epitopes in *Mycobacterium tuberculosis* using human T cell clones. *Lep. Rev.* 57 (Suppl 2): 131-137.
19. Owen, M. J., Crumpton, M. J., Dunne, J., Krissansen, G., Lamb, J. R. & Sewell, W. (1987). Structure and expression of genes involved in T lymphocyte recognition and activation. In: *Immunobiology of Proteins and Peptides IV* (Ed. Atassi, M. Z.) Plenum Publishing Corp: pp. 223-231.
20. Young, D. B., Ivanyi, J. Cox, J. H. & Lamb, J. R. (1987) The 65kDa antigen of mycobacteria - a common bacterial protein? *Immunol. Today* 8: 215-219.
21. Rees, A. D. M., Young, D. B. & Lamb, J. R. (1987) Recognition of epitopes of infectious antigens. *Mem. Inst. Oswaldo Cruz* 82 (Suppl 1): 311-323.
22. Radcliffe, M. J. & Lamb, J. R. (1988) Lymphocyte clones and their culture. In: *Handbook of Experimental Pharmacology* (Eds. Morley, J. & Bray, M. A.) Springer-Verlag, Heidelberg 85 (vol 12): pp. 318-343.
23. Lamb, J. R., Eckels, D. D., Zanders, E. D. & Feldmann, M. (1988) Antigen specific unresponsiveness in helper T cell clones: a model for self tolerance? In: *Immunogenicity of Protein Antigens: Repertoire and Regulation* (Eds. Sercarz, E. E. & Berzofsky, J. A.) CRC Press Vol. II, pp. 59-62.

24. Mehlert, A., Lamb, J. R. & Young, D. B. (1988) Analysis of stress related proteins involved in the immune response to mycobacterial infection. *Biochem. Soc. Trans.* 16: 721-722.
25. Lamb, J. R. & Rees, A. D. M. (1988) Antigen specificity and function of human T lymphocyte clones reactive with mycobacteria. *Brit. Med. Bull.* 44: 600-610.
26. Young, D. B., Mehlert, A., Bal, V., Mendez-Samperio, P., Ivanyi, J. & Lamb, J. R. (1988) Stress proteins and the immune response to mycobacteria - antigens as virulence factors? *Antonie van Leewenhock* 54: 431-439.
27. Rothbard, J. B. & Lamb, J. R. (1989) Prediction and identification of bacterial and parasitic T cell antigens and determinants. In: T cell paradigms in parasitic and bacterial infections (Ed. Kaufmann, S. H. E.) Springer-Verlag, Heidelberg: pp. 143-151.
28. Lamb, J. R. & O'Hehir, R. E. (1989) Cellular and molecular mechanisms of T lymphocyte unresponsiveness induced *in vitro*. *Thymus Update* (eds. Kendall, M. & Ritter, M.) 3: 71-95.
29. Rothbard, J.B., Busch, R., Hill, C.M. and Lamb, J. R. (1989) Structural analysis of a HLA-peptide class II complex. *Cold Spring Harb. Symp. Quant. Biol.* LIV: 431-444.
30. Larche, M., Lamb, J.R. & Ritter, M.A. (1989) p145-MR6: A novel T cell surface molecule with a role in tolerance to self. In: Histopathology of the Immune System (Eds. Fossum & Rolstad) Plenum Publishing Corp., New York: pp. 413-417.
31. Lechler, R. I., Bal, V., Howland, K., Sekaly, R., Long, E. O., Lamb, J. R. & Rothbard, J. B. (1989) Studies of MHC class II restricted antigen recognition by human T cell clones using transfected APC. In: Immunobiology of HLA System Springer-Verlag, New York: II: 369.
32. Lechler, R. I., Bal, V., Ikeda, H., Trowsdale, J., Rothbard, J. B. & Lamb, J. R. (1989) Reversal of an immune response gene effect by point mutation in the antigen sequence. *Transplant. Proc.* 21: 952-955.
33. Lamb, J. R., Lathigra, R., Rothbard, J. B., Sweetser, D., Young, R. & Young, D. B. (1989) Identification of mycobacterial antigens recognized by T cells. *Rev. Inf. Dis.* 2 (Suppl. 2): S443-447.
34. O'Hehir, R. E., Young, D. B., Kay, A. B. & Lamb, J. R. (1989) Clonal analysis of the cellular immune response to house dust mite (*Dermatophagoides farinae*). *Int. Arch. Allerg. Appl. Immunol.* 88: 170-172.
35. Lombardi, G., Sidhu, S., Lamb, J. R., Batchelor, J. R. & Lechler, R. I. (1989) Endogenous peptides contribute to the ligand recognized by anti-DR1 human alloreactive T cells. *Transplant. Proc.* 21: 142-144.

36. Lamb, J. R., Bal, V., Rothbard, J. B., Mehlert, A., Mendez-Samperio, P. & Young, D. B. (1989) The mycobacterial GroEL stress protein: a common target of T cell recognition in infection and autoimmunity. *J. Autoimmunity*. 2 (Suppl): 93-100.
37. Rothbard, J. B., Busch, R., Lechler, R. I., Trowsdale, J. & Lamb, J. R. (1989) Recognition of the HLA class II/peptide complex by the T cell receptor: reversal of MHC restriction of a T cell clone by a point mutation in the peptide determinant. *Phil. Trans. R. Soc. Lond. B*. 323: 553-564.
38. Rees, A. D. M. and Lamb, J. R. (1990) Human T cell recognition of an internal image of a mycobacterial antigen in an anti-idiotypic antibody. In: Idiotypic networks in biology and medicine (Eds. Osterhaus, A. & Uytdehaag, F.) Elsevier Science Publishers B.V. Amsterdam: pp 195-200.
39. Lydyard, P. M., Tsoulfa, G., Sharif, M., Smith, M., Young, D. B., Bahr, G. M., van Embden, J. D., Hay, F. C., Isenberg, D., Gupta, R. S., Lamb, J. R., Mayanil, C. S., Venner, T. & Rook, G. A. W. (1990) Antibodies to heat shock proteins in rheumatoid arthritis. In: Stress proteins in inflammation (Eds. Burdon, R., Rice-Evans, C., Winrow, V. & Blake, D.) Richlieu Press, London: pp.169-182.
40. Lamb, J. R. & Young, D. B. (1990) T cell recognition of stress proteins: a link between infectious and autoimmune disease. *Mol. Biol. Med.* 7: 311-321.
41. Naor, D., Essery, G., Tarcic, N., Kahan, M., Lamb, J. R. & Feldmann, M. (1990) Specific interactions between a human CD4+ clone and autologous bifunctional immunoregulatory clones. *Immunol. Rev.* 116: 63-85.
42. O'Hehir, R. E., Buelow, R., Yssels, H. & Lamb, J. R. (1991) *Staphylococcus aureus* enterotoxin mediated specific non-responsiveness of human T cells. *Immunol. Letters* 30: 165-170.
43. O'Hehir, R. E. & Lamb, J. R. (1991) MHC class II and allergen-specific T cell clones. *Clin. Exp. Allergy* 21 (Suppl. 1): 173-177.
44. O'Hehir, R. E., Garman, R. D., Greenstein, J. L. & Lamb, J. R. (1991) The specificity and regulation of T cell responsiveness to allergen. *Ann. Rev. Immunol.* 9: 76-95.
45. Holan, V., Lamb, J. R. & Malkovsky, M. (1991) Immunological tolerance and lymphokines. *CRC Rev. Immunol.* 6: 481-495.
46. Lamb, J. R. (1992) Modulation of allergic immune responses to *Dermatophagoides* spp. (house dust mite). *MRC News* 55: 12-13.
47. Hewitt, C. R. A., Hayball, J. D., Lamb, J. R. & O'Hehir, R. E. (1992) The superantigenic action of bacterial toxins. In: Molecular Biology of Bacterial

- Infection: current status and future perspectives (Eds. Hormaeche, C. E. B., Penn, C. W. & Smyth, C. J.). Cambridge University Press 49: 149-172.
48. Hewitt, C. R. A. & Lamb, J. R. (1992) *In vitro* model of peptide-mediated T cell anergy. In: Deletion vs Anergy: Models and Reality (Eds. Martinez, C. & Kroemer, G.). Research in Immunology. 143: 294-296.
 49. O'Hehir, R. E. & Lamb, J. R. (1993) T cell recognition of house dust mite allergens. In: The Genetics of Asthma (Eds. Holgate, S., Marsh, D. & Lockhart, A.) Blackwell Scientific Publications Ltd., 17: 201-210.
 50. O'Hehir, R. E., Askonas, B. A. & Lamb J. R. (1993) Cell culture: lymphocyte clones. In: Methods of Immunological Analysis (Eds. Albert, W. H. W. & Staines, N. A.). Springer-Verlag, Heidelberg: 3: 120-138.
 51. O'Hehir, R. E., Higgins, J.A., Jarman, E. R. & Lamb, J. R. (1993) Hyposensitisation of allergic immune responses and T cell anergy. In: T Lymphocytes and Inflammatory Cell Research in Asthma (Eds. Holgate, S.T., Jolles, G., Karlsson, J. A. & Taylor, J. B.). Academic Press. pp.43-54.
 52. O'Hehir, R. E., Higgins, J. A., Jarman, E. R. & Lamb, J. R. (1993) T cell epitopes, MHC antigens and their application. In: Molecular Biology and Immunology of Allergens (Eds. Kraft, D. & Schon, A.) CRC Press Inc: pp 63-69.
 53. Lamb, J. R., Higgins, J. A., Jarman, E. R. & O'Hehir, R. E. (1993) Modulation of allergic immune responses: development of experimental models. In: Molecular Biology and Immunology of Allergens (Eds. Kraft, D. & Schon, A.) CRC Press Inc: pp 83-91.
 54. O'Hehir, R. E., Hoyne, G. F. & Lamb, J. R. (1993) Molecular characterization and immune recognition of allergenic peptides. In: Molecular Biology of the Allergic Immune Response (Eds. Levinson, A. I. & Paterson, Y.) Marcel Dekker Inc: 14: 411-432.
 55. Yeo, A. & Lamb, J. R. (1993) Superantigens as immunogens and tolerogens. *Clin. Exp. Rheum.* 11/S-8: 17-21.
 56. Lobo-Yeo, A., Lake, R. A., Lamb, J. R. & Faith, A. (1993) Tolerance and lymphokine. *Immunomethods* 2: 113-126.
 57. O'Hehir, R. E., Hoyne, G. F., Thomas W. R. & Lamb, J. R. (1993) House dust mite allergy: from epitopes to immunotherapy. *Eur. J. Clin. Invest.* 23: 763-772.
 58. O'Hehir, R. E. & Lamb, J. R. (1993) Human *in vitro* experimental models of CD4+ T cell targeted immunotherapy to house dust mites. *Ann. Allergy* 71: 317-321.

59. Rees, A. D. M., Mehlert, A. & Lamb, J. R. (1994) Molecular analysis of the cellular immune response to mycobacteria. In: Immunology of Infection (Eds. Borysiewicz, L. K., Sissons, J. G. P. & Cohen, J.) Kluwer Academic Publishers: The Netherlands.
60. Larche, M., Lake, R. A., Hoyne, G. F. & Lamb, J. R. (1994) Immunological events underlying the induction of T cell non-responsiveness. *Int. Arch. Aller. Immunol.* 104: 211-215.
61. Hetzel, C. & Lamb, J. R. (1994) CD4+ T cell targeted immunomodulation and the therapy of allergic disease. *Clin. Immunol. Immunopath.* 73: 1-10.
62. Yssel, H., Fasler, S., Lamb, J. R. & de Vries, J. E. (1994) Induction of non-responsiveness in human allergen specific Th2 cells. *Curr. Opin. Immunol.* 6: 847-852.
63. Hetzel, C., Hoyne, G. F. & Lamb, J. R. (1994) Peptide-mediated immunoregulation. *Int. Arch. Aller. Immunol.* 107: 275-279.
64. Hoyne, G. F., Bourne, T., Kristensen, N. M., Hetzel, C. & Lamb, J. R. (1995) Peptide handling by the immune system. In: Progress in Allergy and Clinical Immunology (Ed. Johansson, S. G. O.) 3: 215-219.
65. Yeo, A & Lamb, J. R. (1995) Manipulating the immune response in allergic disease: targeting CD4+ T cells. *Trends in Biotechnology* 13: 186-190.
66. Hawrylowicz, C., Guida, L., Jarman, E., Hoyne, G., Sadeghi, R., O'Hehir, R. & Lamb, J. (1995) Modulation of immune responses to allergens of house dust mite. *Biochem. Soc. Trans.* 23: 658-663.
67. Hetzel, C., Hoyne, G. F., Kristensen, N. M., Bourne, T., Tsitoura, D. & Lamb, J. R. (1995) Peptide-mediated regulation of allergic diseases. In: MHC molecules: expression, assembly and function. (Eds. Urban, R. G. & Chic, R. M.). RG Landis Co: pp 261-279.
68. Bourne, T., Hetzel, C., Hoyne, G. F., Kristensen, N. M. & Lamb, J. R. (1995) Reprogramming allergen specific immune responses. *ACI News* 7: 168-172.
69. Hetzel, C., Hoyne, G. F. & Lamb, J. R. (1995) Regulation of responses to house dust mite derived allergens. In: Proceedings of the XVI European Congress of Allergology and Clinical Immunology (Eds. Bosomba, A. & Sarstre, A.): pp. 573-81.
70. Hoyne, G. F., Kristensen, N. M., Yssel, H. & Lamb, J. R. (1995) Peptide modulation of allergen specific immune responses. *Curr. Opin. Immunol.* 7: 757-761.
71. Hoyne, G. F., Bourne, T., Kristensen, N., Hetzel, C. & Lamb, J. R. (1996) From epitopes to peptides to immunotherapy. *Clin. Immunol. Immunopath.* 80: S23-30.

72. Lamb, J. R. & O'Hehir, R. E. (1996) Peptide mediated regulation of allergen specific responses. In: New Horizons in Allergy Immunotherapy (Eds. Schon, A, Kraft, D. & Hayglass K. T.) Plenum Press: pp. 451-456.
73. Lord, C. M. J. & Lamb, J. R. (1996) Th2 cells in allergic inflammation; a target of immunotherapy. *Clin. Exp. Allergy* 26: 756-765.
74. Hoyne, G. F. & Lamb, J. R. (1996) Peptide mediated regulation of allergic immune responses. *Immunol. Cell Biol.* 74: 180-186.
75. Lamb, J. R., Tsitoura, D. C. & Hoyne, G. F. (1996) Peptide mediated modulation of allergen specific immune responses. In: Regulatory Control and Standardisation of Allergen Extracts (Eds. Kurth, R., Haustein, D. & Lin, Y.): pp. 14-22.
76. van Neerven, R. J. J., Ebner, C., Yssel, H., Kapsenberg, M. L., Lamb, J.R. (1996) T lymphocyte responses to allergens: epitope specificity and clinical relevance. *Immunol. Today* 17: 256-532.
77. Hetzel, C., Janssen, R., Ely, S., Young D., Lamb, J. R. & Thole, J. (1997) The use of peptides to selectively modulate CD4+ T cell responses. *Biochem. Soc. Trans.* 25/2: 398-403.
78. Edmead, C. E., Lamb, J. R. & Hoyne, G. F. (1997) Molecules in focus - CD28. *Int. J. Biochem. Cell Biol.* 29: 1053-1057.
79. Hoyne, G. F & Lamb, J. R. (1997) Regulation of T cell function in mucosal tolerance. *Immunol. Cell Biol.* 75: 197-201.
80. O'Hehir, R. E., Askonas, B. A. & Lamb, J. R. (1997) T cell cloning. In: Allergy and Allergic Diseases (Ed. Kay, A. B.). Blackwell Scientific Publications: pp: 755-765.
81. Hoyne, G. F., Hetzel, C. & Lamb, J. R. (1997) Immunological tolerance and T cell anergy. In: Allergy and Allergic diseases (Ed. Kay, A. B.) Blackwell Scientific Publications 8: 131-146.
82. Hoyne, G., Stewart, M., Dallman, M. & Lamb, J. R. (1998) Peptide mediated regulation of allergen specific immune responses. *Int. Congress Immunol.* 2: 723-729.
83. Lowrey, J., Savage, N. D. L., Palliser, D., Corsin-Jimenez, M., Forsyth, L. M. G., Hall, G., Lindey, S, Stewart, G. A., Tan, K. A. L., Hoyne, G. F., & Lamb, J. R. (1998) Induction of tolerance via the respiratory mucosa. *Int. Arch. Allergy Immunol.* 116: 93-102.
84. Hoyne, G., Dallman, M. & Lamb, J. R. (1999) Linked suppression in peripheral T cell tolerance to the house dust mite derived allergen Der p 1. *Int. Arch. Allergy Immunol.* 118: 122-125.

85. Lamb, J. R. (1998) Peptide-mediated regulation of allergen-specific immune responses. *Res. Immunol.* 149: 235-240.
86. Palliser, D., Lowrey, J. A., Lamb, J. R. & Hoyne, G. F. (1998) T cell responses to inhaled antigen. *Chem. Immunol.* 71: 161-177.
87. Rolland, J. M., Lamb, J. R. & O'Hehir, R. E. (1998) Activation of allergen reactive T lymphocytes and mechanisms of hyporesponsiveness. In: Asthma and rhinitis (Eds. Holgate, S. & Busse, W.) Vol 2, 109:1669-1686.
88. Shovlin, C. L., Haslett, C. & Lamb, J. R. (1999) The molecular and cellular basis of disease. In Davidson's Principles and Practice of Medicine (Eds. Haslett, C. & Chilvers, E. R.) Churchill Livingstone 1: 2-56.
89. Kristensen, N. S., Yssel, H. & Lamb, J. R. (1999) Peptide mediated immunomodulation of allergen specific immune responses. In: Immunotherapy of Asthma (Eds. Bousquet, J. & Yssel, H.) Marcel Dekker Inc., 17: 281-295.
90. Hoyne, G. F., Dallman, M. J. & Lamb, J. R. (2000) T cell regulation of peripheral tolerance and immunity: the potential role for Notch signalling. *Immunology* 100: 1-12.
91. Lamb, J. R. (2000) Antigen processing, presentation and immunomodulation. *Am. J. Resp. Crit. Care Med.* 162: 138-140.
92. Jarman, E. R., Hoyne, G. F. & Lamb, J. R. (2002) Tolerance to inhaled antigen. In: The Immunological Basis of Asthma (Eds. Lambrecht, B., Diamant, Z., & Hoogsteden, H. C.), Marcel Decker, in press.
93. Hoyne, G. F., Dallman, M. J., Champion, B. J. & Lamb, J. R. (2001) Notch signalling in the generation of regulatory T cells. *Immunol. Rev.* 182: 215-227.

Books:

1. Feldmann, M., Lamb, J. R. & Woody, J. N. (Eds.) Human T cell clones. Humana Press, New York, 1985.
2. Owen, M. J. & Lamb, J. R. Immune Recognition in Focus. IRL Press, 1988. (German translation 1990, Japanese translation 1991).
3. Feldmann, M., Lamb, J. R. & Owen, M. J. (Eds.) T Cells. John Wiley, 1989.
4. Dallman, M. J. & Lamb, J. R. (Eds.) Handbook in Practical Cell Biology: Haematopoietic & Lymphoid Cell Culture. Cambridge Press. 2000.